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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,680	10/23/2001	James E. Bradbury	0329.63829	4637

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EXAMINER

LAUCHMAN, LAYLA G

ART UNIT PAPER NUMBER

2877

DATE MAILED: 09/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,680

Applicant(s)

BRADBURY ET AL.

Examiner

L. G. Lauchman

Art Unit

2877

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-27 is/are allowed.
- 6) ☐ Claim(s) 1-18 and 20-24 is/are rejected.
- 7) ☐ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said axes" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18, 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Batchelder et al (US 5,510,894), and further in view of Nottke et al (US 6,008,888).

As to Claims 1-3, 8, 13 the patent '894 teaches (see Fig. 8) a scannable surface for receiving a sample 112, a Raman spectroscope including a spectroscopic probe 114 (see Fig. 9 and col. 9, lines 5-20) positioned to scan the sample on the scannable surface, translating means for causing relative translation between the surface and the Raman probe, control means 120 for

causing said translating means to move the surface and the sample relative to the probe along X-Y axes (see col.7, lines 55-67, col. 8, lines 1-8), means for analyzing the output of the spectroscopy, for comparing the output images to at least one known material image, and for identifying and communicating data on at least one output image from the sample (see col. 8, lines 39-65). However, the patent does not teach the sample being the pulp or paper sample. The patent '888 teaches a spectroscopic device (see Figs. 3, 5, 6a and 6b) for the analysis and authentication of the optical and e/m properties of paper. The spectrometer compares the read Raman spectra of the sample quantified Raman spectra previously stored in the library. It would have been obvious to one skilled in the art to use apparatus of the patent '894 in application to identification of paper, since Raman spectroscopy has been used for the analysis of paper and printed materials as indicated in the US patent 6,0089,888 (see col. 3, lines 10-53).

As to Claims 4, 5, 6, 12, the patents '894 and '888 teach everything as applied to Claim 1, in addition the patent '888 disclose a library of images of known material, wherein the analyzing means compare the output images of the spectroscopy to the library of images (see Fig. 6a and 6b). The use of the library of images of known materials in the invention of '894 would have been obvious to one skilled in the art, since the patent '894 suggests that the images from the analyzer are stored in the computer 120 for use in the future correlations of the positions of the profile measurements relative to the CCD image.

As to Claim 7, the patents '894 and '888 teach everything as applied to Claim 1, except for the determination of speeds of the control means. It would have been obvious to one skilled in the art to use a processor to produce a Raman spectroscopic analysis within a time frame of about thirty minutes or less, since the speed of the control means is a matter of having a computer processor based on the needs of the user.

As to Claim 9, the patents '894 and '888 teach everything as applied to Claim 1, except for moving the scannable surface continuously or intermittently. It would have been an obvious to scan the surface intermittently in order to examine the selected areas of the sample, or to scan the surface continuously in order to examine all the areas of the sample.

As to Claim 10, the patents '894 and '888 teach everything as applied to Claim 1, in addition, the apparatus of patent '894 measures thickness of the sample, which is a characteristic of the sample along the Z-axis if the sample.

As to Claim 14, the apparatus of Claim 1 is able to perform the method as claimed.

As to Claim 15, the patents '894 and '888 teach everything as applied to Claim 14, except for the determination of speeds of the control means. It would have been obvious to one skilled in the art to use a processor to produce a Raman spectroscopic analysis within a time frame of about thirty minutes or less, since the speed of the control means is a matter of having a computer processor based on the needs of the user.

As to Claims 16, 17, 18, 20, 21 the patents '894 and '888 teach everything as applied to Claim 14, except that the scanning and translating steps are continuous and the identifying step comprises identifying cells of foreign substances. It would have been obvious to scan the surface continuously in order to examine all the areas of the sample. . It would have been obvious to one skilled in the art to use apparatus of the patent '894 in application to identification of paper, since Raman spectroscopy has been used for the analysis of paper and printed materials as indicated in the US patent 6,008,888 (see col. 3, lines 10-53).

As to Claim 22, the apparatus of Claim 1 is able to perform the method as claimed.

As to Claim 23, the apparatus of Claim 1 is able to perform the method as claimed.

As to Claim 24, the patents '894 and '888 teach everything as applied to Claim 23, in addition, the apparatus of patent '894 measures thickness of the sample, which is a characteristic of the sample along the Z-axis of the sample.

Allowable Subject Matter

Claims 25-27 are allowed.

The following is an examiner's statement of reasons for allowance:

As to Claim 25, the prior art of record taken alone or in combination, fails to disclose or render obvious dividing the sample into a plurality of cells,

comparing the scan data from the sample of each plurality of cells with the background data member, flagging each cell with a scan differing from the background data member, and re-caning each of the flagged cells and comparing resultant scan data with said contaminant data members, in combination with the rest of the limitations of the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to TC 2877 via the PTO Fax Center located in CP4-4C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Center number is (703)308-7722 or 308-7724.

If the Applicant wishes to send a Fax dealing with either a Proposed Amendment or for discussion for a phone interview then the fax should:

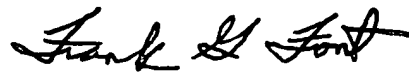
- a) Contain either the statement "DRAFT" or "PROPOSED AMENDMENT" on the Fax Cover Sheet; and
- b) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to L. G. Lauchman whose telephone number is (703) 305-0071.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC receptionist whose telephone number is (703) 308-0956.

L. G. Lauchman
Patent Examiner
Art Unit 2877
8/15/03/lgl



Frank G. Font
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